REMARKS

Upon entry of this amendment, claims 17-26, 37 and 38 are all the claims pending in the application. Non-elected claims 27-36, 39 and 40 have been canceled by this amendment.

Initially, Applicants note that a minor clarifying change has been made to the specification by this amendment. In particular, on page 13 of the specification, Applicants note that the phrase "calculated at Reed-Solomon decoding" has been changed to --calculated at the time of performing Reed-Solomon decoding--. Applicants note that this change has been made in order to correct a translational error that occurred when translating International Application No. PCT/JP03/06909 (hereafter "the '909 international application"), of which the present application is the National Stage.

In this regard, Applicants note that because the '909 international application provides support for the phrase "calculated at the time of performing Reed-Solomon decoding", and the present application is the national stage application of the '909 international application, that the above-noted change to the specification does not introduce new matter.

I. Objections to the Specification and Claim Rejections under 35 U.S.C. § 112, first paragraph

In the Office Action, the Examiner has rejected claims 17-40 under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement, and has objected to the amendment filed on December 15, 2008 for introducing new matter into the disclosure of the invention. In particular, the Examiner indicated that the addition of the phrase "before being deinterleaved" to the specification and claims is not supported by the original disclosure (see

Office Action at page 3). Applicants kindly request that the Examiner reconsider this position in view of the following comments.

In particular, Applicants note that in the Office Action, the Examiner has indicated that "[i]f it is not obvious and inherent that the ECC codeword in Marchant is not a processed by an error correction decoder, then it is not obvious that the 'before being deinterleaved' is obvious from the Applicant's specification" and that "[s]ince the Applicant argues that it is not obvious in Marchant, the Applicant also implicitly argues that it is not possible in the Applicant's own specification" (see Office Action at page 4, lines 17-21).

In response to the Examiner's above-noted comments, Applicants note that in the amendment filed on December 15, 2008, the arguments directed to Marchant centered around Figs. 4 and 5 of Marchant, which are directed to interleaving in a cross-track direction, whereby Applicants indicated that such interleaving (i.e., in the cross-track direction) could not be applied to the ECC codeword as shown in Fig. 7 of Marchant. In particular, Applicants pointed out that if cross-interleaved data was utilized in Fig. 7 of Marchant, that it would be impossible to determine the correct position where a scratch has occurred.

Thus, in the previous response, Applicants arguments were directed specifically to interleaving in the cross-track direction not being applicable to the ECC codeword shown in Fig. 7 of Marchant. In this regard, however, Applicants fully acknowledge that some other type of interleaving (i.e., a type of interleaving other than interleaving in the cross-track direction) could be applied to the ECC codeword shown in Fig. 7 of Marchant.

Based on the foregoing, Applicants note that in view of the Examiner's above-noted comments indicating that "[i]f it is not obvious and inherent that the ECC codeword in Marchant

is not a processed by an error correction decoder, then it is not obvious that the 'before being deinterleaved' is obvious from the Applicant's specification", it is respectfully submitted that because Applicants are simply taking the position that interleaving in the cross-track direction could not be applied to the ECC codeword as shown in Fig. 7 of Marchant, and explicitly acknowledge that some other type of interleaving could be applied thereto, Applicants respectfully submit that it logically follows from the Examiner's above-noted comments that the phrase "before being deinterleaved" should not be considered new matter, and that one of ordinary skill in the art would have understood the disclosure as originally filed to implicitly provide support for such a feature.

In this regard, Applicants note that the MPEP indicates that in order to comply with the written description requirement..., each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure" (emphasis added) (see MPEP 2163(II)(A)(3)(b)). Accordingly, while the specification as originally filed did not expressly utilize the phrase "before being deinterleaved", for the reasons discussed above, Applicants respectfully submit that such a feature is implicitly supported by the originally filed disclosure, and therefore, that one of ordinary skill in the art would have understood, at the time the patent application was filed, that the description requires such a feature.

In view of the foregoing, Applicants respectfully submit that the phrase "before being deinterleaved" should not be considered new matter and, therefore, that the claims satisfy the written description requirement of 35 U.S.C. 112, first paragraph. Therefore, Applicants kindly request that the above-noted objection to the specification and rejection under 35 U.S.C. 112, first paragraph be reconsidered and withdrawn.

II. Claim Rejections under 35 U.S.C. § 102/103

Claims 17, 19, 20, 22, 24 and 25 have been rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Marchant (US 6,631,492) and Kobayashi et al. (US 6,029,264).

Claim 17, as amended, recites that the erasure position information is obtained from a position polynomial that is calculated at a time of performing Reed-Solomon decoding on the Reed-Solomon-coded data. Applicants respectfully submit that Marchant and Kobayashi do not teach or suggest at least this feature of amended claim 17.

With respect to the above-noted feature recited in claim 17, Applicants note that in the Office Action, the Examiner has indicated that the erasure flags of Marchant and Kobayashi correspond to the claimed "erasure position information" (e.g., see pages 14 and 17 of the Office Action). Applicants submit, however, that an erasure flag cannot be obtained from a position polynomial.

Accordingly, because the erasure flags in Marchant and Kobayashi are not obtained from a position polynomial that is calculated at a time of performing Reed-Solomon decoding on Reed-Solomon-coded data, Applicants respectfully submit that Marchant and Kobayashi do not teach, suggest or otherwise render obvious the above-noted feature recited in amended claim 17 which indicates that the erasure position information is obtained from a position polynomial that is calculated at a time of performing Reed-Solomon decoding on the Reed-Solomon-coded data.

In view of the foregoing Applicants respectfully submit that amended claim 17 is patentable over the cited prior art, an indication of which is kindly requested.

Regarding claims 19, 22 and 24, Applicants note that each of these claims has been

amended so as to recite that the erasure position information is obtained from a position polynomial that is calculated at a time of performing Reed-Solomon decoding on the Reed-Solomon-coded data.

For at least similar reasons as discussed above with respect to claim 17, Applicants respectfully submit that Marchant and Kobayashi do not teach, suggest or otherwise render obvious the above-noted feature recited in amended claims 19, 22 and 24. Accordingly, Applicants respectfully submit that claims 19, 22 and 24 are patentable over the cited prior art, an indication of which is kindly requested.

Regarding claims 20 and 25, Applicants note that claim 20 depends from claim 19 and that claim 25 depends from claim 24. Accordingly, Applicants submit that claims 20 and 25 are patentable at least by virtue of their dependency.

III. Claim Rejections under 35 U.S.C. § 103(a)

A. Claims 18, 23, 37 and 38 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Marchant (US 6,631,492) and Kobayashi et al. (US 6,029,264) in view of Shutoku et al. (US 7,089,401).

Regarding claims 18, 23, 37 and 38, Applicants note that each of these claims has been amended so as to recite that the erasure position information is obtained from a position polynomial that is calculated at a time of performing Reed-Solomon decoding on the Reed-Solomon-coded data. For at least similar reasons as discussed above with respect to claim 17, Applicants respectfully submit that Marchant and Kobayashi do not teach, suggest or otherwise render obvious such a feature. Further, Applicants respectfully submit that Shutoku

does not cure the above-noted deficiencies of Marchant and Kobayashi.

Accordingly, Applicants respectfully submit that claims 18, 23, 37 and 38 are patentable over the cited prior art, an indication of which is kindly requested.

B. Claims 21 and 26 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Marchant (US 6,631,492) and Kobayashi et al. (US 6,029,264) in view of Eachus (US 3,685,016).

Claim 21 depends from claim 19, and claim 26 depends from claim 24. Applicants respectfully submit that Eachus does not cure the above-noted deficiencies of Marchant and Kobayashi, with respect to claims 19 and 24. Accordingly, Applicants submit that claims 21 and 26 are patentable at least by virtue of their dependency.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Syuji MATSUDA et al.

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